

```
semaphore sput, sget[3];  
sput = 1; sget[i] = 0; //i=0,1,2
```

```
process businessman(){  
    L1: i = RAND() % 3;  
    j = RAND() % 3;  
    if(i == j)  
        goto L1;  
    P(sput);  
    put items[i] on the table;  
    put items[j] on the table;  
    if((i == 0 && j == 1) || (i == 1 && j == 0))  
        V(sget[2]);  
    if((i == 1 && j == 2) || (i == 2 && j == 1))  
        V(sget[0]);  
    if((i == 0 && j == 2) || (i == 2 && j == 0))  
        V(sget[1]);  
    goto L1;  
}
```

```
process consumer(k){  
    L2: P(sget[k]);  
    take one item from the table;  
    take one item from the table;  
    V(sput);  
    make cigarette and somke;  
    goto L2;  
}
```